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Att. Dkt. No. AVAN001000.D1

**REMARKS**

This is intended as a full and complete response to the Office Action dated June 28, 2005, having a shortened statutory period for response set to expire on September 28, 2005. Claims 1-5 remain pending in the application and stand rejected. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Thatcher et al. (U.S. 5,757,998) in view of Mody et al. (U.S. 2002/0181509 A1). Claim 1 recites a plurality of interface assemblies each having a transmitter part which can be selectively inserted and removed from a common receiver part and a common circuitry operating to drive the interface assemblies. The Examiner admits that Thatcher fails to disclose a common receiver part, but "Mody disclosed a communication system having receivers having a common part" so "[I]t would have been obvious ...to utilize common parts in a receiver for efficiency and cost effectiveness."

Applicant traverses the rejection on grounds that the Examiner's proposed modification of Thatcher would render the modular reconfiguration of Thatcher unsuitable for its intended purpose, which is not a proper basis for an obviousness rejection under 35 USC § 103. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984). Thatcher teaches separate receivers and drive circuitries that are critical to the object of the invention disclosed therein, not a common receiver and circuitry as recited in the base claim 1 and those dependent therefrom. The separate receivers and drive circuitries of Thatcher are part of packages that each includes a transmitter, a receiver and circuits connecting to the receiver and the single transmitter in the package. The packages are hot-pluggable, which enables the packages to be easily interchanged on an electro-optical circuit board. The interchangeability of the packages is a stated object of the design set forth in Thatcher (see Thatcher at col. 8, line 61 through col. 9, line 7), and this interchangeability is dependent on each transmitter and receiver set being packaged together separately. Introducing a common receiving part would defeat the interchangeability of the separate-package design as described in Thatcher and, hence, render the assembly disclosed in Thatcher unsuitable for its intended purpose. Accordingly, withdrawal of the rejection and allowance of the claims is respectfully requested.

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Furthermore, Applicants respectfully traverse the rejection on grounds that the Examiner has not established a *prima facie* case of obviousness. To establish *prima facie* obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. See In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Further, the teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in the applicants' disclosure. See M.P.E.P. § 2143, citing In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991). Still further, the examiner must *particularly* identify any suggestion, teaching or motivation from *within* the references to combine the references (emphasis added). See In Re Dembiczak, 50 USPQ2d 1614 (Fed. Cir. 1999). The mere recitation of a combination of references does not amount to particularly identifying a suggestion, teaching, or a motivation to combine the references. Finally, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

As mentioned above, Thatcher teaches separate receivers and drive circuitries that are critical to the object of the invention disclosed therein, not a common receiver and circuitry as recited in the base claim 1 and those dependent therefrom. The separate receivers and drive circuitries of Thatcher are part of packages that each includes a transmitter, a receiver and circuits connecting to the receiver and the single transmitter in the package. The packages are hot-pluggable, which enables the packages to be easily interchanged on an electro-optical circuit board. The interchangeability of the packages is a stated object of the design set forth in Thatcher (see Thatcher at col. 8, line 61 through col. 9, line 7), and this interchangeability is dependent on each transmitter and receiver set being packaged together separately. Thus, Thatcher does not disclose a common receiver part for receiving signals.

Mody discloses a Multi-Input, Multi-Output (MIMO) Orthogonal Frequency Division Multiplexing (OFDM) communication system 6. "The communication system 6 may either employ L such synchronization circuits 61, one for each OFDM demodulator 22 or it may employ certain parts of the synchronization circuit for all the OFDM demodulators 20 and certain parts that are common to the entire receiver 10." See Mody at paragraph [0103]. Thus, Mody does not provide any suggestion of a common receiver part for receiving signals nor a plurality of interface assemblies, where each interface assembly is sized for receiving a transmitter part which have outer surfaces sized for allowing said transmitter part to slide into

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place within said housing, as recited in claim 1 and those dependent therefrom. Therefore, there is no motivation or suggestion from within the references themselves to combine the teachings of Mody and Thatcher to provide a plurality of interface assemblies each having a transmitter part which can be selectively inserted and removed from a common receiver part and a common circuitry operating to drive the interface assemblies, as recited in base claim 1 and those dependent therefrom. Withdrawal of the rejection and allowance of the claims is respectfully requested.

In addition, claim 1 also requires "each said interface assembly including its own heat sink portions." However, as the Examiner admits, Thatcher fails to disclose heat sinks for each interface assembly. Yet, the Examiner asserts that it would have been obvious "to separate the Thatcher heat sinks onto each interface assembly... since greater heat dissipation is achieved by placing each heat sink directly with each interface assembly rather than on the outer housing."

Applicant respectfully disagrees. Insofar as the record shows, if such statement is true, it has been gleaned from the Applicant's own specification. There is no mention of heat sinks disclosed in Thatcher, let alone each interface assembly having its own heat sink portions. Withdrawal of the rejection and allowance of the claims is respectfully requested.

Claims 2, 3 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Thatcher et al. (U.S. 5,757,998) and Mody et al. (U.S. 2002/0181509 A1) and in further view of Darcie (U.S. 6,014,479). Applicant respectfully traverses these rejections. Darcie suffers from the same deficiencies described above with respect to Thatcher and Mody. Therefore, a combination of Thatcher, Mody and Darcie cannot render the claims obvious. Accordingly, Applicant respectfully requests withdrawal of the rejection.

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harrigan et al. (U.S. 6,069,752) in view of Mody et al. (U.S. 2002/0181509 A1). The Examiner states that Harrigan does not disclose a common receiver part, but "Mody disclosed a communication system having receivers having a common part" so "[I]t would have been obvious ...to utilize common parts in a receiver for efficiency and cost effectiveness."

Applicant traverses the rejection on grounds that the Examiner's proposed modification of Harrigan would render the modular reconfiguration of Harrigan unsuitable for its intended purpose. Proposed modifications cannot render the prior art unsatisfactory for its intended purpose. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984). The purpose of the design in Harrigan

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is to allow easy replacement of the laser assembly included in each replaceable unit should the laser assembly fail. Harrigan specifically states that each replaceable unit is aligned with one of the fiber-optic coupler assemblies within the laser printer. Thus, upon interchanging one of the replaceable units, independent adjustments are made to the respective fiber-optic coupler assembly to, among other things, align the lateral position of the fiber with respect to the replaceable unit and correct angular errors. The capability to make these adjustments is a stated object of the design set forth in Harrigan (see Harrigan at col. 8, lines 30-36 and col. 11, lines 51-57). Introducing a common receiving element would undermine the ability to separately adjust the appropriate fiber-optic coupler assembly with respect to an interchanged replaceable unit and, hence, render the assembly disclosed in Harrigan unsuitable for its intended purpose. Accordingly, withdrawal of the rejection and allowance of the claims is respectfully requested.

Furthermore, Applicants respectfully traverse the rejection on grounds that the Examiner has not established a *prima facie* case of obviousness. To establish *prima facie* obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. See In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Further, the teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, not in the applicants' disclosure. See M.P.E.P. § 2143, citing In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991). Still further, the examiner must *particularly* identify any suggestion, teaching or motivation from *within* the references to combine the references (emphasis added). See In Re Dembiczak, 50 USPQ2d 1614 (Fed. Cir. 1999). The mere recitation of a combination of references does not amount to particularly identifying a suggestion, teaching, or a motivation to combine the references. Finally, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

As mentioned above, Harrigan fails to disclose a common receiver part for receiving signals, as noted by the Examiner. Instead, Harrigan discloses three replaceable units of a laser printer designed to achieve an alignment that is repeatable with respect to separate corresponding fiber-optic coupler assemblies (i.e., receivers). The purpose of the design in Harrigan is to allow easy replacement of the laser assembly included in each replaceable unit should the laser assembly fail. Harrigan specifically states that each replaceable unit is aligned with one of the fiber-optic coupler assemblies within the laser printer. Thus, upon interchanging one of the

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replaceable units, independent adjustments are made to the respective fiber-optic coupler assembly to, among other things, align the lateral position of the fiber with respect to the replaceable unit and correct angular errors. The capability to make these adjustments is a stated object of the design set forth in Harrigan (see Harrigan at col. 8, lines 30-36 and col. 11, lines 51-57). Thus, Harrigan does not disclose a common receiver part for receiving signals.

Mody discloses a Multi-Input, Multi-Output (MIMO) Orthogonal Frequency Division Multiplexing (OFDM) communication system 6. "The communication system 6 may either employ L such synchronization circuits 61, one for each OFDM demodulator 22 or it may employ certain parts of the synchronization circuit for all the OFDM demodulators 20 and certain parts that are common to the entire receiver 10." See Mody at paragraph [0103]. Mody does not provide any suggestion of a common receiver part for receiving signals nor a plurality of interface assemblies, as recited in claim 1 and those dependent therefrom. Therefore, there is no motivation or suggestion from within the references themselves to combine the teachings Mody and Harrigan to provide a plurality of interface assemblies each having a transmitter part which can be selectively inserted and removed from a common receiver part and a common circuitry operating to drive the interface assemblies, as recited in base claim 1 and those dependent therefrom.

In addition, the Examiner states that Harrigan fails to disclose a common circuitry operating to drive interface assemblies, but asserts that it would have been obvious "to integrate the drive circuitry" in Harrigan "to obtain the claimed invention... since it is not novel to separate or group parts and that common circuitry reduces component cost and board space." Applicants challenge the Examiner to provide support in the prior art for such assertion. Insofar as the record shows, if such statement is true, it has been gleaned from the Applicant's own specification. There is no teaching or suggestion of a drive circuitry disclosed in Harrigan, let alone any specific drive circuitries. Moreover, any common drive circuitry for the laser assemblies would hinder easy replacement thereof via the replaceable unit, which is the purpose of the design in Harrigan. Therefore, there is no suggestion whatsoever in Harrigan that the disclosed laser printer may be modified to include a common circuitry operating to drive interface assemblies. Withdrawal of the rejection and allowance of claim 1 and claims dependent thereon is respectfully requested.

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The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the claimed invention. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



Robb D. Edmonds  
Registration No. 46,481  
PATTERSON & SHERIDAN, L.L.P.  
3040 Post Oak Blvd. Suite 1500  
Houston, TX 77056  
Telephone: (713) 623-4844  
Facsimile: (713) 623-4846  
Attorney for Applicant(s)

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